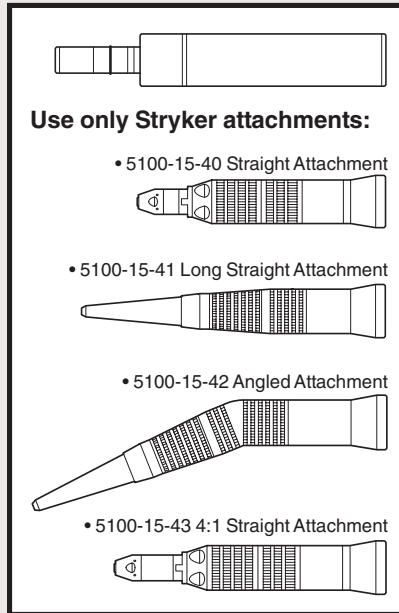


TPS™

MicroDrill REF 5100-15



US Patent: 6,752,816

stryker®
INSTRUMENTS

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European Equivalent 5100-15-713 Rev-D
Japanese Equivalent 5100-15-723 Rev-D
N. Euro Equivalent 5100-15-732 Rev-C


TPS MicroDrill 5100-15, Angled & Straight Attachments

IMPORTANT INFORMATION:
File in your maintenance records

TPS MicroDrill REF 5100-15

For use with the Total Performance System. When used in conjunction with its companion attachments, the MicroDrill is intended for surgical procedures involving drilling, reaming, cutting bone and hard tissue.


 **WARNING:** Before using any TPS component, read and understand its instructions and review the important User/Patient Safety information provided in the TPS Console instruction booklet. Familiarization with the Total Performance System prior to use is important. If you have any questions, contact your Stryker Instruments representative or Stryker Customer Service at 1-800-253-3210.

 **WARNING:** Prior to use, handpiece and accessories should be operated and inspected for damage. Do not use if damage is apparent.

Important Information


Refer to your TPS Cleaning, Maintenance, and Sterilization Recommendations for instrument care information.

User/Patient Safety

 **WARNING:** Heavy sideloads and/or long operating periods may cause the body and distal end of the MicroDrill to overheat such that it becomes uncomfortable to hold and/or causes burn injury to the patient.

Cutting Accessory Information:

■ Use only Stryker approved accessories. A complete list of cutting accessories is available from your Stryker sales representative.

 **WARNING:** Only Stryker TPS MicroDrill Attachments are designed for use with the TPS MicroDrill. Other attachments with E-type connectors may fit but are not intended for use with this handpiece. If other attachments are used, they may cause tissue damage to patient and/or injury to O.R. staff, delay surgery if not functioning optimally, or cause damage to handpiece. NEVER modify any accessory to fit the handpiece.


■ Use only Stryker part number series: 277; 1607; 5300-10; and 5300-20.

■ Use Stryker Irrigation Clips REF 5100-15-541 and 5100-15-542.

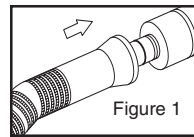
Instructions

NOTE: The MicroDrill can be operated with the TPS Footswitch or the TPS Universal Handswitch.

Assembly:

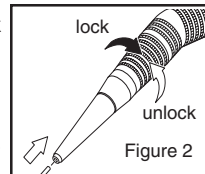
 **WARNING:** DO NOT attach any component while the motor is running.


1. Push the attachment onto the handpiece with a twisting motion. The attachment is secure when it "snaps" into the connector. Figure 1.



NOTE: Make sure the attachment is pressed on as far as possible before running the MicroDrill. You may notice a small gap between the attachment and MicroDrill even when the attachment is properly seated. The gap is caused by the antirotation pin and will not hinder the function of the MicroDrill or attachment. The gap should not be wider than 0.025 in. (0.65 mm).

2. To insert a bur, rotate the lock collar counterclockwise and insert the bur with a twisting motion. Rotate the lock collar clockwise to align the dots and lock the bur in place. Give the bur a gentle tug to ensure it is secure. Figure 2.




 **WARNING:** Burn injury may occur due to friction between the bur and attachment if the bur is not fully locked in the attachment.

Disassembly:

1. Rotate the lock collar counterclockwise to release the bur and pull the bur straight out of the handpiece.
2. Grasp the attachment and pull to remove from handpiece.

Duty Cycle

 Cycle Time = 20 seconds on/20 seconds off
Cycle Frequency = 10 times
Break Between Cycles = 30 minutes

Specifications

MicroDrill (REF 5100-15)

Size: 4.8 in [123mm] Long
.78 in [20mm] Diameter
Weight: .29 lbs [.13 Kg]
Speed: 50,000 RPM



Troubleshooting

Problem Attachment difficult to attach or release from the handpiece.

Cause	Solution
Connectors require a breaking-in period.	Attach and detach the attachment repeatedly until connectors function smoothly.

Build-up of debris inside attachment.	<i>See below.</i>
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Problem Attachment does not retain bur.

Cause	Solution
Lock collar not fully engaged.	Rotate collar counterclockwise. Reinsert bur. Rotate collar fully clockwise. Gently tug bur to ensure it is secure.

Problem Handpiece will not run.

Cause	Solution
Attachment lock collar not fully engaged.	Rotate collar fully clockwise.

Problem Excess vibration.

Cause	Solution
Build-up of debris inside attachment.	<i>See below.</i>

Problem Attachment becomes hot.

Cause	Solution
Build-up of debris inside attachment.	<i>See below.</i>

Attachment bearings need lubrication.	<i>See below.</i>
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Problem Bur will not disengage from attachment.

Cause	Solution
Lock collar not turned fully to release bur.	Rotate collar fully counterclockwise.

Problem Bur seizes in attachment.

Cause	Solution
Lock collar not fully engaged.	Rotate collar counterclockwise. Reinsert bur. Rotate collar fully clockwise. Gently tug bur to ensure it is secure.

Attachment not properly attached to handpiece.	Reinstall attachment. Make sure connection is flush to handpiece.
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**See the TPS Cleaning, Maintenance & Sterilization Recommendations for instructions on lubricating and removing debris from attachments.*